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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,247	06/27/2003	Joseph P. Borst	12150	8560

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EXAMINER

ASINOVSKY, OLGA

ART UNIT PAPER NUMBER

1711

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,247

Applicant(s)

BORST ET AL.

Examiner

Olga Asinovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-60 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-54 of U.S. Patent No.

6,780,932. Although the conflicting claims are not identical, they are not patentably distinct from each other because the chemical formulation of a final graft polyol and a method of making said graft polyol in claims 1-54 of Patent 6,780,932 is readable in applicants claims. The difference is that claims 1-54 of Patent'932 do not use term "phosphorous compound", instead of claims 1-54 disclose a "reaction moderator".

Using the disclosure of said Patent'932 as a dictionary at column 5, lines 37 and 61-64, a said reaction moderator can be a phosphorous compound. A reaction moderator is present during the process of producing a graft polyol. The difference is that claims 1-54 of Patent'932 disclose two stages polymerization process for producing a graft polyol. It would have been obvious to one of ordinary skill in the art to use two stages

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polymerization process in claims 1-54 of Patent'932 since the two stages polymerization process would be expected in the present claims for obtaining the adequate result, because the present claim 59 is disclosing a method of making a final graft polyol in the same two stages. It would have been obvious to one of ordinary skill in the art to use a reaction moderator in claims 1-54 of Patent ' 932 since a term "reactor moderator" can include any component having effect on the process for making a graft polyol and wherein a said reaction moderator is present during the polymerization process.

Claim Rejections - 35 USC § 103

3. Claims 1-60 are rejected under 35 U.S.C. 103(a) as being obvious over Heyman et al U.S. Patent 6,780,932.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the

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application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2). Heyman discloses a process for producing a first graft polyol having a vinyl polymer content of from 3 to 20 wt.%, a carrier polyol, a macromer, an initiator and a reaction moderator, and a preparation of a second final graft polyol by adding ethylenically unsaturated monomer and a reaction moderator in the presence of a first graft polyol, thereby continuously forming a final graft polyol, col. 1, lines 40-50. A reaction moderator is present in both stages during the polymerization. The reaction moderators include phosphorous compound, col. 5, lines 37 and 61-64. The term "macromers", carrier polyol, ethylenically unsaturated monomers are readable in the present claims.

It would have been obvious to one of ordinary skill in the art to use two stages polymerization process in Patent'932 since the two stages polymerization process would be expected in the present claims for obtaining the adequate result, because the present claims 57- 59 is disclosing a method of making a final graft polyol in the same two stages. It would have been obvious to one of ordinary skill in the art to use a reaction moderator in Patent ' 932 since a term "reactor moderator" can include any component having effect on the process for making a graft polyol and wherein a said reaction moderator is present during the polymerization process, and therein a reaction moderator is a phosphorous compound.

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al U.S. Patent 6,172,164.

Davis has been discussed in the office action mailed on 01/31/2005 and it is incorporated here by reference.

6. Applicant's arguments filed 05/31/2005 have been fully considered but they are not persuasive. The argument is that Davis does not disclose a phosphorous compound being present during the polymerization process. The examiner agrees. However, a phosphorous compound is still considering as inert material=non-reactive component. There is no evidence in the present claims of using a said phosphorous compound as a transesterification catalyst. As a flame retardant compound such as a phosphate derivative, this compound can be present at any stage. There is no statement that a phosphorous compound is a reactive compound. Thus, a graft polyol can be modified by employing a phosphate compound during the process of making a graft polymer as a flame retardant compound, this is being obvious to a worker in the art.

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7. Claims 1-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al Patent 6,172,164 in view of Heyman et al U.S. Patent 6,780,932 or Seidel et al U.S. Patent 6,316,584.

It would have been obvious to one of ordinary skill in the art to modify a graft polyol in Davis by employing a phosphorous compound as a reaction moderator by teaching in Heyman'932 because any modification can be expected in graft polyol in Davis invention during the polymerization process.

Seidel discloses a transesterification catalyst that is a phosphorous compound , col. 4, lines 18-19 and 22.

It would have been obvious to one of ordinary skill in the art to modify a graft polyol in Davis by employing a phosphorous compound as a transesterification catalyst for polyols, col. 4, lines 18-22 and 52-57, because any modification or improvement can be expected in graft polyol in Davis invention during the polymerization process.

8. Claims 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al U.S. Patent 6,172,164 as applied to claims 1-56 above, and further in view of Huang et al U.S. Patent 5,223,570 and further in view of Heyman et al U.S. Patent 6,80,932.

The rejection over Davis in view of Huang has been discussed in the office action mailed on 01/31/2005.

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The applicants' argument is that none discloses using a phosphorous compound during the polymerization reaction.

Based on the evidence in the disclosure of Heyman at column 5, lines 37 and 61-64, a phosphorous compound is a reaction moderator for a graft polymer that can be present during the polymerization process.

It would have been obvious to one of ordinary skill in the art to modify a process for making a graft polyol in Davis by continuous polymerization as discloses by Huang because a continuous polymerization of graft polyol is a benefit for increasing size distribution of graft polymer particles. It would have been obvious to employ a phosphorous compound during the polymerization process as teaches Heyman because any modification or improvement in a graft polyol would be expected in Davis invention for obtaining the desired characteristics of said graft polyol.

In light of the new rejections, this office action is not final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O.A.

June 20, 2005

Olga Asinovsky
Examiner
Art Unit 1711



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700